

STATEMENT OF WORK

TITLE: Support for Task Force on Hemispheric Transport of Air Pollution
CONTRACTOR: EC/R, Inc.
CONTRACT: EP-D-14-033
WA#: 2-03
DURATION: November 1, 2016 – September 30, 2017

WORK ASSIGNMENT MANAGER:

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SUMMARY:

The purpose of this Work Assignment is to provide logistical support to the U.S. Environmental Protection Agency (EPA) efforts to improve the understanding of the long-range transport of air pollution and its impacts on implementation of the National Ambient Air Quality Standards (NAAQS) and other environmental objectives. In particular, this Work Assignment provides logistical and analytical support for the Task Force on Hemispheric Transport of Air Pollution (TF HTAP) organized under the Convention on Long-Range Transboundary Air Pollution (LRTAP Convention). TF HTAP is co-chaired by EPA staff.

Under this Work Assignment, the contractor will be responsible for

- maintaining a website providing information about the TF HTAP and its activities
- performing data processing and analysis of the results of coordinated global modeling experiments organized by TF HTAP
- providing logistical support for three TF HTAP-related meetings
- identifying appropriate experts to participate in the TF HTAP-related meetings and arranging their travel to and from the meetings

BACKGROUND:

The EPA is responsible for the review, development, promulgation and implementation of the National Ambient Air Quality Standards (NAAQS). Although domestic sources are the primary contributors to nonattainment of the NAAQS, the United States is both a source and a receptor for the international transport of air pollutants. Pollutants not only flow across our borders with Canada and Mexico, but also travel great distances between North America and Asia, Africa, Europe, and other parts of world. To help States implement and attain the NAAQS, EPA needs to understand these international influences and how they are changing over time. One forum that EPA has used to improve our understanding of these issues is the TF HTAP.

The TF HTAP is charged with organizing international cooperative research and analysis to improve the understanding of the intercontinental transport of air pollutants across the Northern Hemisphere. The TF HTAP is co-chaired by EPA on behalf of the United States and the European Commission on behalf of the European Union. The TF HTAP has developed a multi-year work plan encompassing a range of analytical work addressing emissions inventories and projections; source/receptor and source apportionment analyses; model/observation and process evaluation; impacts on health, ecosystem, and climate; impacts of climate change on pollution; and a distributed data network and analysis tools. Under this Work Assignment, the contractor will provide logistical and analytical support to the U.S. co-chair of TF HTAP as they seek to implement this work plan.

This Work Assignment follows on work completed by the contractor under previous contracts (EP-D-09-051) and previous work assignments under this contract (WA 1-03). However, the work described here does not duplicate work conducted under any previous work assignment or contract.

REQUIREMENTS:

Task 1: Work Plan Development and Progress Reports

The contractor shall prepare a Work Plan for completing the requirements of this Work Assignment. The Work Plan will describe the tasks; identify a schedule for deliverables, staffing, level of effort, and costs; and present conflict of interest certification. The contractor shall submit the Work Plan to the Work Assignment Manager (WAM) within 15 business days of receipt of the Work Assignment.

The contractor shall submit monthly progress reports to the WAM, describing the work that has been accomplished, labor usage and costs incurred to date, and projected labor usage and costs at project completion. The reports shall describe any difficulties encountered in completing the work and identify remedial actions taken during the reporting period. The contractor shall submit the progress report as specified in the contract.

The Contractor shall submit progress reports and work products in electronic format (i.e., PDF).

Task 2: Maintenance of HTAP Website

Under previous work assignments, the contractor established a public website to provide a mechanism for participants to register for TF HTAP meetings and to distribute substantive and logistical information to those participants (<http://www.htap.org/>). Under this work assignment, the contractor shall maintain this website and shall modify its content based on written technical directives from the WAM to

- disseminate information about TF HTAP activities to the public and TF HTAP participants
- facilitate participant registration for meetings or workshops organized by the TF HTAP during the project period, as needed. Currently 1 meeting requiring registration is anticipated (see Task 4).

Task 3: Data Processing and Analysis of HTAP2 Global Modeling Experiments

The TF HTAP has organized a series of comparative global modeling experiments (known as HTAP2) to evaluate the ability of global atmospheric chemistry models to simulate intercontinental transport and to quantify intercontinental source-receptor relationships. The design of the HTAP2 experiments, the model output specifications, and the requested variables are documented on the HTAP website and wiki at:

<http://iek8wikis.iek.fz-juelich.de/HTAPWiki/Theme2>

(or <http://www.htap.org>, Select Work Plan > 2. Source-Receptor Modeling)

The outputs of the model simulations have been collected on the AeroCom server hosted by the Meteorological Service of Norway (met.no). Instructions for establishing an account and accessing the AeroCom server are provided on the wiki page noted above. The modeling data can be visualized through the AeroCom Web Interface (without an account) at

http://aerocom.met.no/cgi-bin/aerocom/surfobs_annualrs.pl?PROJECT=HTAP&MODELLIST=HTAP-phaseII

Under this task, the contractor shall assist TF HTAP contributors in the processing and submission of results to the AeroCom server. The contractor shall also prepare summary statistics and comparisons for the model simulation results that are available for the HTAP2 experiments on the AeroCom server, including population exposure metrics for comparison to the outputs of the adjoint version of the GEOS-Chem model submitted by the University of Colorado, Boulder, under Work Package 2.5 of the TF HTAP work plan.

In their monthly report, the contractor shall report the status of any submissions processed by the contractor. When updates are available, the contractor shall provide to the WAM the results of summaries and comparisons in electronic form, preferably in Excel spreadsheets.

Task 4: Logistical Support for Modeling Workshop, April 2017, Research Triangle Park, NC

The TF HTAP intends to organize a 2-3 day workshop in April 2017 at EPA's campus in Research Triangle Park. The date has not yet been determined. The workshop will focus on identifying lessons that are available to be learned from the HTAP2 modeling experiments and comparisons to observations.

Under this task, the contractor shall provide a registration facility for the workshop as well as make meeting materials and products available via the website, www.htap.org.

In consultation with the TF HTAP Co-chairs, the contractor shall identify key participants/speakers for the workshop that require travel support. The experts should be drawn from non-profit research institutions in the United States and from research institutions and government agencies in countries identified by the TF HTAP Co-chairs. These countries may include: Albania, Andorra, Belarus, Cambodia, China, Egypt, India, Indonesia, Israel, Japan, South Korea, Kazakhstan, Laos, Malaysia, Maldives, Mexico, Mongolia, Myanmar, Nepal, Philippines, Russia, Sri Lanka, Tajikistan, Thailand, Turkmenistan, Ukraine, Uzbekistan, and

Vietnam. The contractor shall submit the names of identified experts to the WAM as they are identified. To the extent that funding allows, the contractor shall make the necessary travel and lodging arrangements for the identified experts to enable them to participate in the workshops, leveraging any other available travel funding. The contractor shall provide to the WAM a list of the supported experts and the status of their travel and lodging arrangements at appropriate intervals prior to the meeting. It is expected that the contractor will be able to fund travel for up to 7 participants to the workshop.

Task 5: Logistical Support for Policy Workshop, May 2017, Paris, France

The TF HTAP is working with the LRTAP Convention's Task Force on Integrated Assessment Modeling to plan a workshop in Paris, 2-3 May 2017. The workshop will focus on comparing the relative costs and benefits of air pollution control measures inside and outside the UNECE region. The workshop will be hosted by INERIS (national institute for industrial safety and environmental protection) in France.

In consultation with the TF HTAP Co-chairs, the contractor shall identify key participants/speakers for the workshop that require travel support. The experts should be drawn from non-profit research institutions in the United States and from research institutions and government agencies in countries identified by the TF HTAP Co-chairs. These countries may include: Albania, Andorra, Belarus, Cambodia, China, Egypt, India, Indonesia, Israel, Japan, South Korea, Kazakhstan, Laos, Malaysia, Maldives, Mexico, Mongolia, Myanmar, Nepal, Philippines, Russia, Sri Lanka, Tajikistan, Thailand, Turkmenistan, Ukraine, Uzbekistan, and Vietnam. The contractor shall submit the names of identified experts to the WAM as they are identified. To the extent that funding allows, the contractor shall make the necessary travel and lodging arrangements for the identified experts to enable them to participate in the workshops, leveraging any other available travel funding. The contractor shall provide to the WAM a list of the supported experts and the status of their travel and lodging arrangements at appropriate intervals prior to the meeting. It is expected that the contractor will be able to fund travel for up to 7 participants to the workshop.

Task 6: Logistical Support for GEOS-Chem Users Meeting, May 2017, Cambridge, MA

GEOS-Chem is one of the most widely used global atmospheric chemical transport models in the United States and around the world and is used by several groups participating in TF HTAP. Every two years, Harvard University organizes an international GEOS-Chem users conference. The eighth International GEOS-Chem Users Meeting (IGC8) will take place 1-4 May 2017. It is useful for the TF HTAP to support this activity and to use this meeting to disseminate information about its activities.

Working with the organizers of the GEOS-Chem meeting, the contractor will identify participants in TF HTAP or PhD students and early-career scientists that have an interest in attending IGC8 but do not otherwise have the travel resources. The participants may be drawn from non-profit research institutions in the United States and from research institutions and government agencies in countries identified by the TF HTAP Co-chairs. These countries may include: Albania, Andorra, Belarus, Cambodia, China, Egypt, India, Indonesia, Israel, Japan,

South Korea, Kazakhstan, Laos, Malaysia, Maldives, Mexico, Mongolia, Myanmar, Nepal, Philippines, Russia, Sri Lanka, Tajikistan, Thailand, Turkmenistan, Ukraine, Uzbekistan, and Vietnam. The contractor shall submit the names of identified participants to the WAM as they are identified. To the extent that funding allows, the contractor shall make the necessary travel and lodging arrangements for the identified individuals to enable them to participate in the workshops, leveraging any other available travel funding. The contractor shall provide to the WAM a list of the supported experts and the status of their travel and lodging arrangements at appropriate intervals prior to the meeting. It is expected that the contractor will be able to fund travel for up to 7 participants to the workshop.

SCHEDULE & DELIVERABLES:

The schedule and deliverables for each of the tasks are identified in the Requirements section above.